INSPECTION AND ACCEPTANCE OF METAL POSTS, BRACES, AND RAILS FOR CHAIN-LINK FENCE

GENERAL

Steel posts, braces and rails shall meet the requirements of Article 4154.10 of the Standard Specifications.

Chain link fabric shall meet the requirements of Article 4154.03 of the Standard Specifications. Brace wire, Tie wire and tension wire shall meet the requirements of Article 4154.05 of the standard specifications.

Special fittings for chain link fence/braces, diagonal tension rods, round steel roads, lock devices) shall meet the requirements of Article 4154.11 of the Standard Specifications.

Gates for chain link fence shall meet the requirements of Article 4154.12 of the Standard Specifications.

ACCEPTANCE

Acceptance of posts, braces, rails and fabric for chain link fence shall be on the basis of satisfactory test results. A minimum of 1 sample per source per year shall be required.

1. Posts-shall be galvanized standard weight meeting schedule 40 of ASTM F-1083. Posts shall be furnished with an approved cap. For 3-inch and 4-inch posts. Cap shall make a driving fit over the upper 1/2-inch of the post or shall have other approved means for holding the cap securely in place.

2. Fabric-Shall be 72-inch high and fabricated from No. 9 wire 3.76 mm(0.148 inch) diameter. Typical diamond count shall meet the requirements of ASTM A-491 or A-392 for the wire size and height requirements. Fabric shall have the salvaged knuckled top and bottom unless is specified differently and/or as indicated on the plans.

   Zinc Coated Fabric shall be Type II coating. The weight of zinc coating shall not be less than 610g/m^2 (2 oz/ft^2) of uncoated wire surface. (ASTM A-392) for the specified diameter.

   Aluminum Coated Fabric shall be Type I coating. The weight of Aluminum coating shall not be less than 122 g/m^2 (0.40 oz/ft^2) for the specified diameter. (ASTM A.491).

   Breaking Strength - Wire constituting the fabric shall meet the requirements of ASTM A-491 and A-817 for No. 9 wire, 3.76 mm (0.148 in) diameter, minimum breaking strength 5740 N (1290 lbf). The required minimum breaking strength requirements shall include both the Type I Aluminum coated (Aluminized) and the Type II Zinc coated (Galvanized).

3. Material Certification - from producer or supplier shall be required on a project-by-project basis stating that the materials supplied meet the requirements of the specifications.

4. Samples-Test samples shall be a minimum of 6-inch in length and shall represent posts, top rail and brace material of the same lot.

   Test samples shall represent a cross section of a minimum of 305 mm wide X 1830 mm high (12-inch X 72-inch) of the same lot.

   Note: Height may be variable and/or as required by contract document.

5. Identifications-Samples identifications are required and shall state the source, origin, manufacturer and whether they are zinc or aluminum coated.

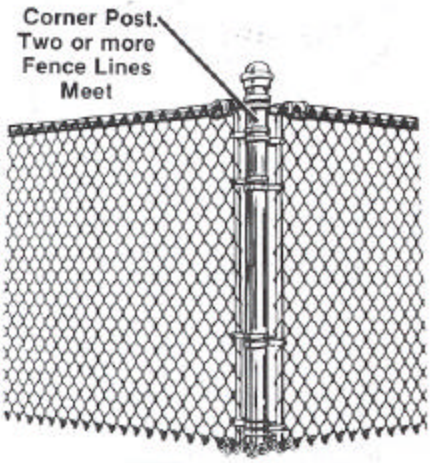
PRODUCT APPROVAL OF ALTERNATE MATERIALS

Applications for product approval of alternate materials shall be made, in writing, to the Office of Materials in Ames, Iowa. The application shall include a certification from fabricator or supplier stating compliance with ASTM requirements. A complete and detailed product description along with test data from appropriate bending tests to demonstrate compliance with strength and stiffness requirements performed by certified & independent laboratory. A sample of the material at least 610 mm (2.0 ft) in length shall accompany the application.

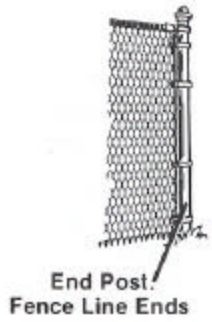
Product approval will be based on compliance with the requirements of Article 4154.10 of the standard specifications and with strength, stiffness, thickness, coating requirements and all applicable ASTM requirements.

Protective coating other than zinc or aluminum shall be tested by comparison in salt spray exposure and by other tests such as accelerated weathering that are deemed proper for evaluating the material in question.

Brace Band



Corner Post



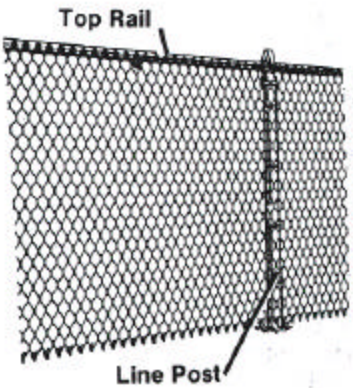
End Post

Diamond Count

Chain Link Fence Fabric

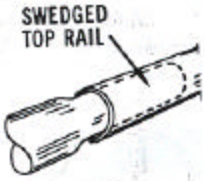
Knuckle

Rail End



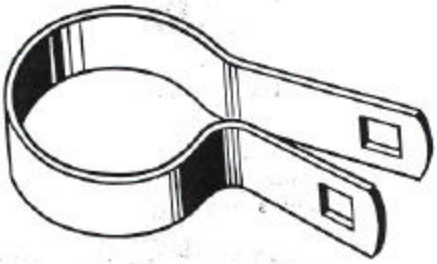
Line Post

Toprail Sleeve

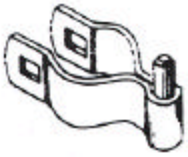


Swedge

Line Post Cap



Tension Band



Post Hinge

Tension Bar